

**U.S. DEPARTMENT OF COMMERCE
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**MANUFACTURING METHODS AND TECHNOLOGY MEASURE FOR
PLASTIC HOUSINGS FOR C-2328-B-GRA-39 AND
C-2329-B-GRA-39 RADIO**

**EAGLE-PICHER INDUSTRIES, INCORPORATED
JOPLIN, MISSOURI**

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TWELFTH QUARTERLY PROGRESS REPORT

1 May 1976 to 31 July 1976

Manufacturing Methods and Technology Measure

For Plastic Housings for

C-2328-B-GRA-39 and C-2329-B-GRA-39 Radio

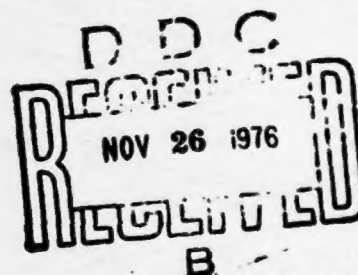
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**U. S. Army Electronics Command
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DRSEL-PP-I-PI-1
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Commander

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This project has been accomplished as part of the U. S. Army Advance Production Engineering Program, which has as its objective the timely establishment of manufacturing processes, techniques or equipment to insure the efficient production of current or future defense programs.

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**MANUFACTURING METHODS AND TECHNOLOGY MEASURE
FOR PLASTIC HOUSINGS FOR C-2328-B-GRA-39 and C-2329-B-GRA-39**

RADIO

TWELFTH QUARTERLY PROGRESS REPORT

1 May 1976 to 31 July 1976

**Object of study; Establish a pilot production
capability for producing plastic cases
for Army Radio Sets - AN-GRA-39B**

AMC Contract # DAAB05-73-C-2081

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ABSTRACT

1. First Articles have been found acceptable.
2. Pilot Run complete.
3. Acceptance Testing initiated.

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I. PURPOSE

The primary objective of this project is to perform the production engineering required to permit the replacement of aluminum housings with molded plastic housings for the AN/GRA-39B Radio Telephone. Major accomplishments which will result from the project are as follows:

1. To provide the engineering effort required to establish a capability for pilot line production of the following AN/GRA-39B Radio Housing parts.

| | | | |
|----------|---------------|----------|---------------|
| A. Panel | (SM-D-450185) | C. Case | (SM-D-450170) |
| B. Panel | (SM-D-450179) | D. Cover | (SM-D-456214) |
2. Determination, design and fabrication of special tooling, special test equipment, and prototype machines for the pilot line.
3. To prepare and revise as necessary a Management Evaluation Program.
4. Application of Quality Control Procedures including Quality Control Checks of pertinent points of manufacture.
5. To design, fabricate and test engineering samples for design approval.
6. To fabricate and test First Article Samples using pilot line equipment and tooling referred to in 2 above.
7. To perform a Pilot Production Run of 24 parts each to demonstrate the capability of producing 20 radio housings per 8 hour day.

8. To prepare test reports for engineering samples, First Article samples and Pilot Production units including reworked and rejected items.
9. To submit Monthly Letter Reports, Formal Quarterly Reports and a Final Report covering the entire period of the project. Also a step by step procedure of manufacturing instructions, specifications, information, and other data will be provided.
10. To prepare a General Report on Step II in accordance with paragraph 3.5.3 of Electronics Command Industrial Preparedness Procurement Requirements No. 15, Revised 3 August 1971.

II. FACTUAL DATA

A. First Article Retest

During the last report period, the first article samples were submitted by Eagle-Picher and approved by USAECOM.

B. Pilot Production Run

Also during the pilot production run was in progress, USAECOM representative, Mr. Dick Lane, was at Eagle-Picher during the production to witness assembly methods, procedures and production rates. The production run was for twenty-five radio housings (not containing the radio set). No problems were experienced with required production rates being met.

C. Acceptance Testing

Acceptance testing has been initiated during this report period. No problems have been experienced with approximately twenty percent of the testing complete.

D. Program Schedule

All line items of the contract have been completed except those scheduled below:

| | <u>Complete</u> |
|---------------------------|-----------------|
| Acceptance Testing | 9/15/76 |
| Final Report Complete | 9/30/76 |
| Ship Pilot Run Units (25) | 9/30/76 |
| Ship Test Samples (8) | 9/30/76 |

III. CONCLUSIONS

The First Article Testing (rerun) was successfully completed and the Pilot Production Run witnessed by a representative from USAECOM during the last quarter. The rerun of the First Article Tests was completed with no failures.

Production rate requirements were met, with production procedures and techniques recorded.

It can be concluded the Production Engineering Measure requirements were demonstrated during the production run.